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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/733,012	12/08/2000	Kannan Govindarajan	10001421-1	2472

7590 01/23/2004

HEWLETT-PACKARD COMPANY
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EXAMINER

NGUYEN, CINDY

ART UNIT	PAPER NUMBER
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2171

DATE MAILED: 01/23/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/733,012

Applicant(s)

GOVINDARAJAN ET AL.

Examiner

Cindy Nguyen

Art Unit

2171

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 December 2000.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-60 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 9-11, 13, 17-30, 31-34, 39-41, 43, 47-60 is/are rejected.
- 7) ☐ Claim(s) 5-8, 12, 14-16, 35-38, 42 and 44-46 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

This is in response to application filed on December 08, 2000 in which claims 60 are presented for examination.

1. Specification

The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code. Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01. e.g at page 7, it contains an embedded hyperlink. Correction is requested.

The appendices A and B and an improper one labeled simply "Miscellaneous" are noted and made of record, but they are very voluminous (552 pages). Unless these appendices are required for support of the claims, it is to the advantage of everyone involved to place them on CD ROM like Appendix A and not print them. Please reconsider resubmitting them in this form or submit a statement that they are necessary under 35 USC 112 first paragraph.

2. Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-4, 9-11, 13, 17-21, 23-28, 31-34, 39-41, 43, 47-51, 53-58 are rejected under 35 U.S.C. 102(e) as being anticipated by Teare et al. (U.S 6151624) (Teare).

Art Unit: 2171

Regarding claims 1 and 31, Teare discloses: a computer system and a method of typing resources, including one or more first resources, in a distributed system executable over a computer network, the method comprising:

At least two computers connected over the computer network (col. 10, lines 60 to col. 11, lines 6, Teare) and a computer program executable on each computer generating processes accessible to at least one other computer over the computer network (col. 10, lines 60 to col. 11, lines 6, Teare) wherein the computer programs further comprises computer instructions for for each first resource (col. 9, lines 49-61, Teare), associating one or more first descriptions with corresponding first resources, wherein at least one of the first resources is discoverable using a corresponding first description (col. 10, lines 12-21, Teare); and for each first description, associating a first explanation with a corresponding first description (col. 7, lines 1-9, Teare), wherein the first resource is discoverable using a corresponding first explanation (col. 7, lines 43-55, Teare).

Regarding claims 17 and 47, Teare discloses: a system and a method of discovering one or more target resources in a distributed system executable over two or more computers interconnected by a computer network, the distributed system including an infrastructure executable on each computer connecting the resources, the resources including service, vocabulary and contract resources, the method comprising:

receiving a search request for the target resources (col. 11, lines 2- 6, Teare) from a client (70 fig. 1B, Teare), including a target description describing the target resources (col. 13, lines 36-58, Teare);

Art Unit: 2171

searching a database of resource information, wherein the resource information includes:

one or more resource descriptions describing associated resources (col. 13, lines 26-58, Teare),

explanatory information. explaining the resource descriptions (col. 7, lines 1-9, Teare), and

access data for accessing the associated resource (col. 14, lines 46-65, lines 6, Teare);

determining whether one or more resource descriptions match the target description (col. 8, lines 3-13, Teare); and

sending result information about matching resources to the client (col. 15, lines 32-42, Teare).

Regarding claims 2 and 32, all the limitations of these claims have been noted in the rejection of claims 1 and 31 above, respectively. In addition, Teare discloses: wherein one or more of the first explanations are supplied by the distributed infrastructure (col. 7, lines 35-42, Teare).

Regarding claims 3 and 33, all the limitations of these claims have been noted in the rejection of claims 1 and 31 above, respectively. In addition, Teare discloses: wherein the first explanations are second resources separate from the first resources (col. 7, lines 10-20, Teare).

Regarding claims 4 and 34, all the limitations of these claims have been noted in the rejection of claims 1 and 31 above, respectively. In addition, Teare discloses: wherein: each first description includes one or more first attributes describing the first resource (col. 7, lines 1-9,

Art Unit: 2171

Teare); and for each first description, each first explanation includes one or more first attribute properties explaining the first attributes (col. 8, lines 21-36, Teare).

Regarding claims 9 and 39, all the limitations of these claims have been noted in the rejection of claims 1 and 31 above, respectively. In addition, Teare discloses: wherein the resources further include third resources, further comprising: for each first resource, associating one or more first access data for accessing the first resource, wherein the first resource is discoverable using the first access data (col. 14, lines 46-65, Teare).

Regarding claims 10 and 40, all the limitations of these claims have been noted in the rejection of claims 9 and 39 above, respectively. In addition, Teare discloses: wherein one or more of the first access data are supplied by the distributed infrastructure (col. 15, lines 60 to col. 16, line 5, Teare).

Regarding claims 11, 13, 41 and 43, all the limitations of these claims have been noted in the rejection of claims 9 and 39 above, respectively. In addition, Teare discloses: wherein the first access data are third and fourth resources (col. 7, lines 34-42, Teare).

Regarding claims 18 and 48, all the limitations of these claims have been noted in the rejection of claims 17 and 47 above, respectively. In addition, Teare discloses: wherein the request is received from a locally connected client (col. 8, lines 37-48, Teare).

Regarding claims 19 and 49, all the limitations of these claims have been noted in the rejection of claims 17 and 47 above, respectively. In addition, Teare discloses: wherein the request is received from a remote computer over the computer network (col. 13, lines 19-45, Teare).

Art Unit: 2171

Regarding claims 20 and 50, all the limitations of these claims have been noted in the rejection of claims 17 and 47 above, respectively. In addition, Teare discloses: wherein: the target description includes a reference to the target resource (col. 7, lines 43-55, Teare).

Regarding claims 21 and 51, all the limitations of these claims have been noted in the rejection of claims 17 and 47 above, respectively. In addition, Teare discloses: wherein: the target description includes target attributes describing the target resources (col. 8, lines 64 to col. 9, lines 4, Teare); the resource descriptions include resource attributes describing the resources (col. 8, lines 19-36, Teare); and determining whether one or more resource descriptions match the target description includes comparing the attributes in the target description with the attributes in the resource descriptions (col. 7, lines 56 to col. 8, lines 13, Teare).

Regarding claims 23 and 53, all the limitations of these claims have been noted in the rejection of claims 17 and 47 above, respectively. In addition, Teare discloses: further comprising: if the target description includes a reference to a contract resource (usage profiles) to which the target resources are typed, then searching only resource information in the database typed to the contract resource (col. 9, lines 30-40, Teare).

Regarding claims 24 and 54, all the limitations of these claims have been noted in the rejection of claims 17 and 47 above, respectively. In addition, Teare discloses: further comprising: if the target description includes a reference to a vocabulary resource to which the target resources are typed, then searching only resource information in the database typed to the vocabulary resource (col. 18, lines 18-29, Teare).

Regarding claims 25 and 55, all the limitations of these claims have been noted in the rejection of claims 17 and 47 above, respectively. In addition, Teare discloses: wherein: if the



target description includes a reference to a vocabulary resource and to a contract resource to which the target resources are typed, then searching only resource information in the database typed to the vocabulary resource and the contract resource (col. 20, lines 21-33, Teare).

Regarding claims 26 and 56, all the limitations of these claims have been noted in the rejection of claims 17 and 47 above, respectively. In addition, Teare discloses: wherein the result information includes references to the matching resources (col. 12, lines 40-52, Teare).

Regarding claims 27 and 57, all the limitations of these claims have been noted in the rejection of claims 17 and 47 above, respectively. In addition, Teare discloses: wherein the references include URLs to the matching resources (col. 7, lines 1-9, Teare).

Regarding claims 28 and 58, all the limitations of these claims have been noted in the rejection of claims 17 and 47 above, respectively. In addition, Teare discloses: wherein the result includes interface data for accessing the matching resources (col. 13, lines 19-22, Teare).

4. *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 22 and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Teare et al. (U.S. 6151624) (Teare) in view of Shear et al. (U.S. 6112181) (Shear).

Regarding claims 22 and 52, all the limitations of these claims have been noted in the rejection of claims 21 and 51 above, respectively. However, Teare didn't disclose: wherein the target description includes a query describing a relationship among the attributes; and

Art Unit: 2171

determining whether one or more resource descriptions match the target description includes comparing the relationship among attributes described by the query with the relationship among attributes described in the resource descriptions. On the other hand, Shear discloses: wherein the target description includes a query describing a relationship among the attributes (col. 65, lines 10-32, Shear); and determining whether one or more resource descriptions match the target description includes comparing the relationship among attributes described by the query with the relationship among attributes described in the resource descriptions (col. 65, lines 10-32, Shear). Thus, at the time invention was made, it would have been obvious to a person of ordinary skill in the art to include query describing a relationship among the attributes and determining whether one or more resource descriptions match the target description includes comparing the relationship among attributes described by the query with the relationship among attributes described in the resource descriptions in the system of Teare as taught by Shear. The motivation being to enable the system defined the using information gathered directly from the consumer and compare and class utility to create class hierarchy, classification scheme, category and category schema using at least some rights management information and returns the resources with identifying and class information as col. 65, lines 10-32, Sheare).

6. Claims 29, 30, 59 and 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Teare et al. (U.S 6151624) (Teare) in view of Glynias et al. (U.S 6125383) (Glynias).

Regarding claims 29 and 59, all the limitations of these claims have been noted in the rejection of claims 28 and 48 above, respectively. However, Teare didn't disclose: wherein the interface data includes the set of IDL interfaces supported by each matching resource. On the other hand, Glynias discloses: wherein the interface data includes the set of IDL interfaces

Art Unit: 2171

supported by each matching resource (col. 9, lines 1-17, Glynias). Thus, at the time invention was made, it would have been obvious to a person of ordinary skill in the art to include the set of IDL interfaces supported by each matching resource in the system of Teare as taught by Glynias. The motivation being to enable the system handles connection management and deliver data defining by its interfaces (col. 9, lines 1-17, Glynias).

Regarding claims 30 and 60 all the limitations of these claims have been noted in the rejection of claims 28 and 48 above, respectively. In addition, Teare/Glynias discloses: wherein the interface data includes stub classes for invoking methods on the matching resources (col. 9, lines 25-44, Glynias). Thus, at the time invention was made, it would have been obvious to a person of ordinary skill in the art to include stub classes for invoking methods on the matching resources in the system of Teare as taught by Glynias. The motivation being to enable the system represents the mapping between the language of implementation of the client and the object request broker (col. 9, lines 41-45, Glynias).

7. Allowable Subject Matter

Claims 5-8, 12, 14-16, 35-38, 42 and 44-46 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The prior art of record and that encountered while searching for the claimed invention fails to anticipate and/or suggest: a method and system of typing resources in a distributed system comprising: wherein the resources further include second resources further comprising: for each first explanation that is not supplied by the distributed infrastructure associating one or more

Art Unit: 2171

second descriptions with corresponding the first explanation, wherein the first explanation is discoverable using the second description; and for each second description, associating a second explanation with the second description, wherein the first explanation is discoverable using the second explanation as recited in claims 5 and 35.

Regarding claims 6-8 and 36-38, these claims depend from claims 15 and 35 respectively and are therefore allowable.

The following is a statement of reasons for the indication of allowable subject matter: The prior art of record and that encountered while searching for the claimed invention fails to anticipate and/or suggest: a method and system of typing resources in a distributed system comprising: wherein the resources further include second resources further comprising: wherein the resources further include fourth resources further comprising associating a third explanation explaining the third description, wherein the access data is discoverable using the third explanation as recited in claims 12 and 42.

Regarding claims 14-16 and 44-46, these claims depend from claims 12 and 42 respectively and are therefore allowable.

8. Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Paik et al. (U.S 6076088). Information extraction system and method using concept relation concept (CRC) triples.

Art Unit: 2171

Song (U.S 5432930). System for accessing cobol data files by generating a dictionary of NF relations to be used by a cobol compatible SQL.

Young (U.S 584856). Process and apparatus for simplifying access to information stored in databases.

Narayan (U.S 5418957). Network data dictionary.

9. Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cindy Nguyen whose telephone number is 703-305-4698. The examiner can normally be reached on M-F: 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on 703-308-1436. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and 703-872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

CN

Cindy Nguyen
January 20, 2004

Wm
WAYNE AMSBURY
PRIMARY PATENT EXAMINER